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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **KAWATO, Eizo**

Group Art Unit: **2881**

Serial Number: **10/694,991**

Examiner: **SMITH, Johnnie L.**

Filed: **October 29, 2003**

Confirmation No.: **5300**

For: **ION TRAP DEVICE AND ITS TUNING METHOD**

Customer No. **38834**

**REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.111**

Mail Stop: Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

September 22, 2004

Sir:

Applicant responds herein to the June 30, 2004 Office Action.

Claims 1-8 stand rejected under 35 U.S.C. § 102(e) as anticipated by McLuckey et al. (U.S. Patent No. 6,452,168). Applicant respectfully traverses this rejection.

Claim 1 describes an ion trap device that has a "tuning circuit," and the claim specifies that:

... the tuning circuit is adjusted so that a resonance frequency is shifted from the driving frequency.

Claims 2-4 depend from claim 1, so they also describe such subject matter. Claim 5 describes a method of tuning an ion device, and the claim specifies that:

... the tuning circuit is adjusted so that a resonance frequency of the resonance circuit is shifted from the driving frequency.

Claims 6-8 depend from claim 5, so they also describe such subject matter. Accordingly, for McLuckey et al. to anticipate the claims, this reference must teach this quoted subject matter.

However, McLuckey et al. does not teach the subject matter quoted above. Applicant acknowledges that column 3, lines 3-26, is cited in the Office Action, but this excerpt does teach the quoted subject matter. Although McLuckey et al. might teach an apparatus and method for using for an ion trap device, there is no disclosure of a tuning circuit for changing a resonance frequency of the resonant circuit as claimed. McLuckey et al. simply discusses the resonance frequency of ions trapped in a trapping field.

For at least the reason that McLuckey et al. does not teach the claimed subject quoted above, the anticipation rejection should be withdrawn as unjustified.

Nonetheless, applicant indicates as follows additional claimed subject matter not taught by McLuckey et al.

Regarding claims 2 and 6, the Office Action indicates that McLuckey et al. teaches in column 3, lines 16-23, an ion trap device wherein, if the resonance frequency deviates in a direction as the RF voltage increases, the resonance frequency of the resonant circuit is shifted in the same direction. However, there is no such discussion in the quoted excerpt.

Regarding 3, 4, 7, and 8, the Office Action indicates that McLuckey et al. teaches in Figs. 3 and 4 an ion trap device wherein the tuning circuit uses a coil with a core, wherein the core is moved to change the resonance frequency. However, although the transformers in these figures may appear to have cores, there is no description or teaching in McLuckey that the purported cores are moved to change the inductance of the coils in order to change the resonance frequency.

As discussed above, there is simply no teaching in McLuckey et al. of a tuning circuit for changing a resonance frequency of the resonant circuit, wherein the tuning circuit is adjusted so that the resonance frequency is deliberately shifted from the driving frequency. Such a feature enhances the sensitivity and precision of the mass analysis of the mass spectrometers using the

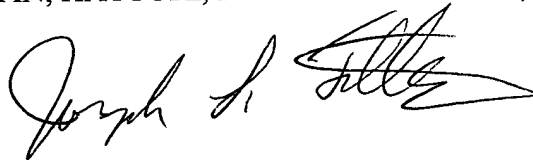
ion trap device. Therefore, McLucky et al. cannot anticipate the claims 1-8. Accordingly, withdrawal of the anticipation rejection is now solicited.

In view of the remarks above, applicant now submits that the application is in condition for allowance. Accordingly, a Notice of Allowability is hereby requested. If for any reason it is believed that this application is not now in condition for allowance, the Examiner is invited to contact applicant's undersigned attorney at the telephone number indicated below to arrange for disposition of this case.

In the event that this paper is not timely filed, applicant petitions for an appropriate extension of time. The fees for such an extension, or any other fees which may be due, may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

A handwritten signature in black ink, appearing to read "Joseph L. Felber", with a stylized flourish at the end.

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Atty. Docket No. **031096**

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